

# CLAIMS

1. A system for monitoring a site in vivo comprising
  - a housing configured for being immobilized in vivo;
  - at least one sensing device for obtaining data of the site,
  - 5 said sensing device connected to said housing;
  - a transmitter for transmitting the data obtained by the sensing device; and
  - a receiving system for receiving the data transmitted by the sensor.
- 10 2. The system according to claim 1 further comprising a processing unit for processing the data obtained from the sensing device.
3. the system according to claim 1 further comprising a processing/controlling unit for processing the data obtained from the sensing device and for controlling the sensing device in accordance with the data obtained from the sensing device.
- 15 4. The system according to claim 1 wherein the receiving system comprises a display for displaying the transmitted data.
5. The system according to claim 1 further comprising an internal power source.
- 20 6. The system according to claim 5 wherein the internal power source is a battery.

7. The system according to claim 1 wherein the sensing device is selected from the group consisting of: an optical scanner, a pH meter, a thermometer, a sensor of electrical conductivity of tissues or an image sensor.
- 5 8. The system according to claim 1 wherein the sensing device is a pH meter.
9. The system according to claim 1 wherein the sensing device is an image sensor.
10. The system according to claim 9 wherein the image sensor comprises  
10 a detector that is optically changed in response to changes in environmental conditions
11. The system according to claim 1 wherein the transmitter is a wireless transmitter.
12. The system according to claim 1 wherein the housing is configured for  
15 being sewn to an in vivo site.
13. The system according to claim 1 wherein the housing comprises at least one ring on the perimeter of the housing for threading a suture there through.
14. The system according to claim 1 wherein the housing comprises an  
20 indentation around the perimeter of the housing, said indentation configured for receiving a suture.

15. The system according to claim 1 wherein the housing comprises a niche configured for receiving means for anchoring the housing to a body tissue.

16. The system according to claim 15 wherein the means for anchoring the housing to a body tissue are selected from the group consisting of: pins, clasps, fasteners and suction means.

17. The system according to claim 1 wherein the housing comprises means for anchoring the housing to a body tissue.

18. The system according to claim 17 wherein the means for anchoring the housing to a body tissue are selected from the group consisting of: pins, clasps, fasteners and suction means.

19. A system for post surgery monitoring comprising

a housing configured for being immobilized in the vicinity of a surgery site in vivo;

at least one sensing device for obtaining data of the site, said sensing device connected to said housing;

a transmitter for transmitting the data obtained by the sensing device; and

a receiving system for receiving the data transmitted by the sensor.

20. The system according to claim 19 wherein the sensing device is an image sensor.

21. The system according to claim 1 for monitoring a site in the GI tract.

22. The system according to claim 21 for monitoring a site in the GI tract.
23. An immobilizable in vivo sensing device comprising a housing configured for being immobilized in vivo and an in vivo sensor for obtaining in vivo data.
- 5 24. The device according to claim 23 further comprising a processing unit for processing the data obtained from the in vivo sensor.
25. The device according to claim 23 further comprising a processing/controlling unit for processing the data obtained from the in vivo sensor device and for controlling the device in accordance with the data obtained from the in vivo sensor.
- 10 26. The device according to claim 23 further comprising an internal power source.
27. The device according to claim 26 wherein the internal power source is a battery.
- 15 28. The device according to claim 23 wherein the in vivo sensor is selected from the group consisting of: an optical scanner, a pH meter, a thermometer, a sensor of electrical conductivity of tissues or an image sensor.
29. The device according to claim 23 wherein the sensing device is a pH meter.
- 20 30. The device according to claim 23 wherein the sensing device is an image sensor.

31.The device according to claim 23 wherein the image sensor comprises a detector that is optically changed in response to changes in environmental conditions.

32.The device according to claim 23 further comprising a transmitter for transmitting the data obtained by the in vivo sensor.

33.The device according to claim 32 wherein the transmitter is a wireless transmitter.

34.The device according to claim 23 wherein the housing is configured for being sewn to an in vivo site.

35.The device according to claim 23 wherein the housing comprises at least one ring on the perimeter of the housing for threading a suture there through.

36.The device according to claim 23 wherein the housing comprises an indentation around the perimeter of the housing, said indentation configured for receiving a suture.

37.The device according to claim 23 wherein the housing comprises a niche configured for receiving means for anchoring the housing to a body tissue.

38.The device according to claim 23 wherein the means for anchoring the housing to a body tissue are selected from the group consisting of: pins, clasps, fasteners and suction means.

39.The device according to claim 23 wherein the housing comprises means for anchoring the housing to a body tissue.

40. The device according to claim 39 wherein the means for anchoring the housing to a body tissue are selected from the group consisting of: pins, clasps, fasteners and suction means.

5 41. A drain catheter having a distal end and a proximal end, wherein the distal end is inserted into a patient's body and wherein the proximal end is out side of the patient's body, said catheter comprising an imaging device attached to the distal end of the catheter for obtaining in vivo data.

10 42. The catheter according to claim 41 wherein the imaging device comprises an at least one image sensor and at least one illumination source.

43. The catheter according to claim 42 further comprising a battery.

15 44. The catheter according to claim 41 wherein the imaging device comprises a detector that is optically changed in response to changes in environmental conditions.

45. The catheter according to claim 41 further comprising a transmitter for transmitting the in vivo data.

46. The catheter according to claim 45 wherein the transmitter is a wireless transmitter.

20 47. A method for monitoring an in vivo site comprising the steps of  
Immobilizing a sensing device in the vicinity of an in vivo  
site;  
sensing the in vivo site; and

receiving sensed data of the in vivo site.

48. The method according to claim 47 further comprising the step of transmitting sensed data prior to the step of receiving the sensed data.

5 49. The method according to claim 47 wherein the sensing device is an imaging device.

50. The method according to claim 47 wherein receiving the sensed data is done externally.

51. The method according to claim 47 wherein the in vivo site is in the GI tract.

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